

Epidemiology Kept Simple (3e) Errata listing

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page 207, paragraph 3, sentence 1: squeeze the word “merely” into this paragraph as follows:
a common misapplication of confidence intervals to view them *merely* as "significant" or "not significant" by comparing their limits with a fixed value."

Comment: The word "merely" is introduced because people will inevitably interpret CIs as significant and nonsignificant. I suppose that I don't have a major problem with that as long as they also interpret the entire interval. To clarify, a 95% confidence interval for an RR that does not include 1 is said to be "statistically significant" [I hate that term] at the $\alpha = .05$ level because it excludes the "null" RR of 1. A 95% CI for an RR that excludes 1 is said to be statistically significant at the $\alpha = .05$ level because it is not compatible with an RR of 1 at the $\alpha = .05$ level. For example, *none* of the CIs in Figure 9.4 on page 207 are statistically significant at $\alpha = .05$. In fact, the same can be said for the studies in Figure 9.5. However, the overall RR (represented by the diamond) is statistically significant at $\alpha = .05$ because the CI is (0.75 - 0.96).

page 208, Figure 9.5: The lower confidence limit for Study 7 should say “0.66” (not 1.66).

page 340, paragraph 2 (Section heading): Heading should read “15.2 Chi-square test for statistical interaction” (i.e., add the word “interaction”)

page 449. Replace Question 2 with the following text:

Question 2 Notice that the data in the 2-by-2 tables that appear in Tables A5.1 - A5.3 have cells with 0 or 1 counts. For example, in the CDC-1 study (Table A5.1), the $OR = (50)(7)/(43)(0)$. This derives a undefined with a limit of infinity (i.e., as the denominator gets smaller, the ratio gets infinitely larger.) One approach for calculating an odds ratio with data of this sort is to add 0.5 to each table cell. For, example, the small sample odds ratio for the data in Table A5.1 is:

$$OR_{\text{small sample}} = (50.5)(7.5)/(0.5)(43.5) = 17.4$$

This can be justified in terms of unbiasing the statistical expectation of the odds ratio (Jewell, 1986). Using this small sample size approach, calculate the odds ratios for each of the case-control studies in Tables A5.1 - A5.3. From these data, would you conclude that TSS is associated with tampon use? Do you consider the Utah study to be consistent or inconsistent with the other two studies?